

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) In a multimedia computer amplified speaker system having a speaker driver for transducing into sound through a bass speaker an audio electrical signal that has an amplitude, the improvement comprising:

a dynamic bass equalization circuit with a second or higher order active filter having automatic dynamically adjusted gain and frequency response that vary with the amplitude of the audio electrical signal,

the active filter including an amplifier with a negative feedback path which reduces a gain of said amplifier as said amplitude of said audio electrical signal increases such that the gain of a bass sound is produced by said bass speaker is reduced;
and

a low pass filter coupled to said bass equalization circuit that allows only bass signals to pass.

2. (original) The speaker system of claim 1 in which the active filter includes a Sallen-Key high pass filter.

3. (canceled)

4. (canceled)

5. (previously presented) The speaker of claim 31 in which the amplifier includes an output and the negative feedback path includes a resistor connected in series with the parallel pair of opposed diodes and the amplifier output.

6. (previously presented) The speaker system of claim 31 in which the amplifier includes a positive feedback path having a voltage divider that voltage divides a feedback voltage.

7. (original) The speaker of system claim 6 in which the amplifier includes an output and the negative feedback path includes a resistor connected in series with the parallel pair of opposed diodes and the amplifier output.

8. (original) The speaker system of claim 1 in which the active filter includes an amplifier with a positive feedback path having a voltage divider that voltage divides a feedback voltage.

9. (original) The speaker system of claim 1 in which the dynamic bass equalization circuit provides a bass equalized audio signal that is delivered to a sub-woofer speaker driver.

10. (original) The speaker system of claim 1 in which the dynamic bass equalization circuit provides a bass equalized audio signal that is delivered to a full-range speaker driver.

11. (currently amended) A speaker configured to receive an audio electrical signal that has an amplitude from a multimedia computer, comprising:

a speaker housing;

an electrical signal input;

at least one treble band speaker;

a sub-woofer speaker;

a dynamic bass equalization circuit coupled between said electrical signal input and said sub-woofer speaker,

a low pass filter coupled to said bass equalization circuit that allows only bass signals to pass.

said dynamic bass equalization circuit including a second or higher order Sallen-Key high pass filter having a dynamically adjusted gain and frequency response that vary with the amplitude of the audio electrical signal,

the active filter including

an amplifier and

a negative feedback path that includes a parallel pair of opposed diodes

which reduce a gain of said amplifier as said amplitude of said audio electrical signal increases.

12. (canceled)

13. (canceled)

14. (previously presented) The speaker of claim 11 in which the amplifier includes an output and the negative feedback path includes a resistor connected in series with the parallel pair of opposed diodes and the amplifier output.

15. (previously presented) The speaker of claim 11 in which the amplifier includes a positive feedback path having a voltage divider that voltage divides a feedback voltage.

16. (previously presented) The speaker of claim 15 in which the amplifier includes an output and the negative feedback path includes a resistor connected in series with the parallel pair of opposed diodes and the amplifier output.

17. (previously presented) The speaker of claim 11 in which the active filter includes an amplifier with a positive feedback path having a voltage divider that voltage divides a feedback voltage.

18. (previously presented) The speaker of claim 11 in which the dynamic bass equalization circuit provides a bass equalized audio signal that is delivered to a sub-woofer speaker driver.

19. (previously presented) The speaker of claim 11 in which the dynamic bass equalization circuit provides a bass equalized audio signal that is delivered to a full-range speaker driver.

20. - 30. (canceled)

31. (previously presented) The speaker system of claim 1 wherein said feedback path includes a parallel pair of opposed diodes which reduce the gain of said amplifier as said amplitude of said audio electrical signal increases.